

# Work Order ID 123415

**\*123415\***

Page 1

Thursday, August 07, 2014 11:15:02 AM

Item ID: D3535-25 Accept **\*N900040100\*** Setup Start **\*NS1\***  
 Revision ID: Stop **\*NS2\***  
 Item Name: Wearplate Center  
 Start Date: 8/07/14 Start Qty: 12.00 **\*12\*** Cust Item ID:  
 Required Date: 8/07/14 Req'd Qty: 12.00 **\*15\*24** Customer:  
 Reference:

Approvals: Process Plan: ML5 Date: 14-08-08 Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_  
 Run Start **\*NR1\***  
 Stop **\*NR2\***

| Sequence ID/<br>Work Center ID | Operation<br>Description | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| Draw Nbr                       | Revision Nbr             |                      |         |        |              |               |               |                  |                |
| D3535                          | Rev B                    |                      |         |        |              |               |               |                  |                |

|                   |   |      |  |  |  |  |  |  |  |
|-------------------|---|------|--|--|--|--|--|--|--|
| 100               | FLOW WATER JET  | 0.00 |  |  |  |  |  |  |  |
| <b>*100*</b>      |   |      |  |  |  |  |  |  |  |
| Waterjet          | Memo  | 0.00 |  |  |  |  |  |  |  |
| FLOW CNC Waterjet | 1-Cut as per Dwg D3535 Dwg Rev: <u>B</u> Prog Rev: <u>B</u> 2-<br>Deburr if necessary |      |  |  |  |  |  |  |  |
| 304/316.040       |   |      |  |  |  |  |  |  |  |
| 110               | QC2- Inspect parts off machine FAI/FAIB   | 0.00 |  |  |  |  |  |  |  |
| <b>*110*</b>      |   |      |  |  |  |  |  |  |  |
| QC                | Memo  | 0.00 |  |  |  |  |  |  |  |
| Quality Control   |   |      |  |  |  |  |  |  |  |
| 120               | QC8- Inspect parts - second check   | 0.00 |  |  |  |  |  |  |  |
| <b>*120*</b>      |   |      |  |  |  |  |  |  |  |
| QC                | Memo  | 0.00 |  |  |  |  |  |  |  |
| Quality Control   |   |      |  |  |  |  |  |  |  |

DAS  
46  
9-89  
14/08/20

DAS  
46  
9-89  
14/08/20

DAS  
38  
9-89  
14-8-21

DQA:

Date: 14/12/08



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date: 14/12/13

Work Order update only ☐

|                           |   |  |                                    |   |                                      |
|---------------------------|---|--|------------------------------------|---|--------------------------------------|
| Work Order: <u>123415</u> | <b>DISPOSITION</b><br>Rework <input type="checkbox"/><br>Scrap <input checked="" type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/> | <b>AGAINST DEPARTMENT/PROCESS</b>      |                                    |   |                                      |
| Part No. <u>D3535-25</u>  |   | Skid-tube <input type="checkbox"/>     | Crosstube <input type="checkbox"/> | Water Jet <input checked="" type="checkbox"/> | Engineering <input type="checkbox"/> |
| NCR No. <u>144307</u>     |   | Machining <input type="checkbox"/>     | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/>    | Quality <input type="checkbox"/>     |
|                           |   | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/>  | Other <input type="checkbox"/>       |
|                           |   | Large Fab <input type="checkbox"/>     | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/>             |                                      |

| Root Cause    | Date     | Step | Qty | Description of work order update or non-conformance | Initial Chief Eng | Action Description   | Sign & Date                                    | Verification | QC Inspector |
|---------------|----------|------|-----|---|-------------------|--|--|--------------|--------------|
| Design        |          |      |     | A bug in the waterjet system.                       |                   | Scrap + Data   | DAS 46   |              |              |
| Doc/Data      |          |      |     |   | DAS 16            | OH + 4   | 9-89   |              | DAS 16       |
| Equip/Tooling |          |      |     | PC Machi malfunction                                | 9-89              | and Repl.  | 14/09/20                                       | 14/09/22     | 9-89         |
| Handling/Pre  |          |      |     |   |                   |  |  |              |              |
| Material      |          |      |     | Caution lds. to be circled.                         |                   |  |  |              |              |
| Operator      |          |      |     |   | Q32042            |  |  |              | Q32042       |
| Offset/Setup  | 14/08/13 | 100  | 14  | PC Machi malfunction                                | 14/08/20          | Have machine examined and schedule maintenance from manufacturer | Corrupt files, corrected by Recheck completed. |              | 14/08/20     |
| Process       |          |      |     |   |                   |  |  |              |              |
| Supplier      |          |      |     |   |                   |  |  |              |              |
| Training      |          |      |     |   |                   |  |  |              |              |
| Transport     |          |      |     |   |                   |  |  |              |              |
| Unapproved    |          |      |     |   |                   |  |  |              |              |

## FAULT CATEGORY

|  |  |   |   |
|--|--|---|---|
| <b>Landing Gear</b><br><input type="checkbox"/> Bending<br><input type="checkbox"/> Centre Not Concentric<br><input type="checkbox"/> Cracks<br><input type="checkbox"/> Crimp/Kink/Ripple/Wave<br><input type="checkbox"/> Cuffs<br><input type="checkbox"/> Crushing<br><input type="checkbox"/> Heat Treat<br><input type="checkbox"/> Inspection Strip in Tube<br><input type="checkbox"/> Marks/Chatter<br><input type="checkbox"/> Turning Sequence<br><input type="checkbox"/> Wave/Twist in Tube | <b>General</b><br><input type="checkbox"/> Bend<br><input type="checkbox"/> BOM/Route<br><input type="checkbox"/> Broken/Damage/Defect<br><input type="checkbox"/> Burrs<br><input type="checkbox"/> Contamination<br><input type="checkbox"/> Countersink<br><input type="checkbox"/> Cut Too Short<br><input type="checkbox"/> Drawing<br><input type="checkbox"/> Drill Holes<br><input type="checkbox"/> Finish<br><input type="checkbox"/> Fit/Function | <input type="checkbox"/> Folio/Program<br><input type="checkbox"/> Grain<br><input type="checkbox"/> Hardware<br><input type="checkbox"/> Inspection Incomplete/Unqualified<br><input type="checkbox"/> Instructions Incomplete/Unclear<br><input type="checkbox"/> Misaligned/off center<br><input type="checkbox"/> Mislabeled<br><input type="checkbox"/> Misread<br><input type="checkbox"/> Off-set<br><input type="checkbox"/> Out of Calibration<br><input type="checkbox"/> Out of Sequence | <input type="checkbox"/> Outside Dimensions<br><input type="checkbox"/> Over/Under tolerance<br><input type="checkbox"/> Part Incorrect<br><input type="checkbox"/> Part Lost/Missing<br><input type="checkbox"/> Part Moved<br><input type="checkbox"/> Positioned Wrong<br><input type="checkbox"/> Power Loss/Surge<br><input type="checkbox"/> Pressure/Forced<br><input type="checkbox"/> Set-up<br><input type="checkbox"/> Temperature/Cure<br><input type="checkbox"/> Weld<br><input type="checkbox"/> Wrong Stock Pulled<br><input checked="" type="checkbox"/> Other |
| Machi malfunction  |  |   |   |

# Work Order ID 123415

**\*123415\***

Page 2

Thursday, August 07, 2014 11:15:02 AM

Item ID: D3535-25 Accept **\*N900040100\*** Setup Start **\*NS1\***  
Revision ID: Stop **\*NS2\***  
Item Name: Wearplate Center  
Start Date: 8/07/14 Start Qty: 12.00 **\*12\*** Cust Item ID:  
Required Date: 8/07/14 Req'd Qty: 12.00 **\*12\*** Customer:  
Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

| Sequence ID/<br>Work Center ID    | Operation<br>Description   | Set Up/<br>Run Hours | Tool ID | Tool #            | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp            |
|-----------------------------------|--|----------------------|---------|-------------------|--------------|---------------|---------------|------------------|---------------------------|
| 130<br><b>*130*</b><br>Brake NC   | NC BRAKE   | 0.00                 |         | DAS<br>30<br>9-89 |              | 24            |               |                  | 14/08/29                  |
| Brake NC                          | Memo<br>1-Form on CNC Brake as per Dwg D3535 using Jigs DT8261and DT83262-<br>Form joggle on Punch as per Dwg D3535 using Jig DT8158Identify as D3535-25 | 0.00                 |         |                   |              |               |               |                  |                           |
| 140<br><b>*140*</b><br>QC         | QC5- Inspect part completeness to step on W/O  | 0.00                 |         |                   |              | (24)          |               |                  | DAS<br>38<br>9-89 14-8-29 |
| Quality Control                   | Memo   | 0.00                 |         |                   |              |               |               |                  |                           |
| 150<br><b>*150*</b><br>Powdercoat | Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3   | 0.00                 |         |                   |              |               |               |                  |                           |
| Powder Coating                    | Memo<br>START TIME: 9:05 OVEN TEMPERATURE:<br>FINISH TIME: 9:35  | 0.00                 |         |                   |              | 24-φ 14-9-3   |               |                  | DAS<br>34<br>9-89         |

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

|  |  |   |
|--|--|---|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/> | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/><br/>           Machining <input type="checkbox"/><br/>           Thermoforming <input type="checkbox"/><br/>           Large Fab <input type="checkbox"/> </div> <div>           Crosstube <input type="checkbox"/><br/>           Small Fab <input type="checkbox"/><br/>           Finishing <input type="checkbox"/><br/>           Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/><br/>           Prod. Eng. Coord. <input type="checkbox"/><br/>           Rec/Store/Packaging <input type="checkbox"/><br/>           Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/><br/>           Quality <input type="checkbox"/><br/>           Other <input type="checkbox"/> </div> </div> |
|--|--|---|

| Root Cause    | Date | Step | Qty | Description of work order update or non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---------------|------|------|-----|---|-------------------|--------------------|-------------|--------------|--------------|
| Design        |      |      |     |   |                   |                    |             |              |              |
| Doc/Data      |      |      |     |   |                   |                    |             |              |              |
| Equip/Tooling |      |      |     |   |                   |                    |             |              |              |
| Handling/Pre  |      |      |     |   |                   |                    |             |              |              |
| Material      |      |      |     |   |                   |                    |             |              |              |
| Operator      |      |      |     |   |                   |                    |             |              |              |
| Offset/Setup  |      |      |     |   |                   |                    |             |              |              |
| Process       |      |      |     |   |                   |                    |             |              |              |
| Supplier      |      |      |     |   |                   |                    |             |              |              |
| Training      |      |      |     |   |                   |                    |             |              |              |
| Transport     |      |      |     |   |                   |                    |             |              |              |
| Unapproved    |      |      |     |   |                   |                    |             |              |              |

### FAULT CATEGORY

|  |  |   |  |
|--|--|---|--|
| <b>Landing Gear</b><br><input type="checkbox"/> Bending<br><input type="checkbox"/> Centre Not Concentric<br><input type="checkbox"/> Cracks<br><input type="checkbox"/> Crimp/Kink/Ripple/Wave<br><input type="checkbox"/> Cuffs<br><input type="checkbox"/> Crushing<br><input type="checkbox"/> Heat Treat<br><input type="checkbox"/> Inspection Strip in Tube<br><input type="checkbox"/> Marks/Chatter<br><input type="checkbox"/> Turning Sequence<br><input type="checkbox"/> Wave/Twist in Tube | <b>General</b><br><input type="checkbox"/> Bend<br><input type="checkbox"/> BOM/Route<br><input type="checkbox"/> Broken/Damage/Defect<br><input type="checkbox"/> Burrs<br><input type="checkbox"/> Contamination<br><input type="checkbox"/> Countersink<br><input type="checkbox"/> Cut Too Short<br><input type="checkbox"/> Drawing<br><input type="checkbox"/> Drill Holes<br><input type="checkbox"/> Finish<br><input type="checkbox"/> Fit/Function | <input type="checkbox"/> Folio/Program<br><input type="checkbox"/> Grain<br><input type="checkbox"/> Hardware<br><input type="checkbox"/> Inspection Incomplete/Unqualified<br><input type="checkbox"/> Instructions Incomplete/Unclear<br><input type="checkbox"/> Misaligned/off center<br><input type="checkbox"/> Mislabeled<br><input type="checkbox"/> Misread<br><input type="checkbox"/> Off-set<br><input type="checkbox"/> Out of Calibration<br><input type="checkbox"/> Out of Sequence | <input type="checkbox"/> Outside Dimensions<br><input type="checkbox"/> Over/Under tolerance<br><input type="checkbox"/> Part Incorrect<br><input type="checkbox"/> Part Lost/Missing<br><input type="checkbox"/> Part Moved<br><input type="checkbox"/> Positioned Wrong<br><input type="checkbox"/> Power Loss/Surge<br><br><input type="checkbox"/> Pressure/Forced<br><input type="checkbox"/> Set-up<br><input type="checkbox"/> Temperature/Cure<br><input type="checkbox"/> Weld<br><input type="checkbox"/> Wrong Stock Pulled<br><input type="checkbox"/> Other |
|--|--|---|--|



DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

|  |      |      |     |  |                   |   |             |              |              |  |  |
|--|------|------|-----|--|-------------------|---|-------------|--------------|--------------|--|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ |      |      |     | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/> |                   | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/><br/>           Machining <input type="checkbox"/><br/>           Thermoforming <input type="checkbox"/><br/>           Large Fab <input type="checkbox"/> </div> <div>           Crosstube <input type="checkbox"/><br/>           Small Fab <input type="checkbox"/><br/>           Finishing <input type="checkbox"/><br/>           Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/><br/>           Prod. Eng. Coord. <input type="checkbox"/><br/>           Rec/Store/Packaging <input type="checkbox"/><br/>           Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/><br/>           Quality <input type="checkbox"/><br/>           Other <input type="checkbox"/> </div> </div> |             |              |              |  |  |
| Root Cause   | Date | Step | Qty | Description of work order update or non-conformance  | Initial Chief Eng | Action Description  | Sign & Date | Verification | QC Inspector |  |  |
| Design   |      |      |     |  |                   |   |             |              |              |  |  |
| Doc/Data   |      |      |     |  |                   |   |             |              |              |  |  |
| Equip/Tooling  |      |      |     |  |                   |   |             |              |              |  |  |
| Handling/Pre   |      |      |     |  |                   |   |             |              |              |  |  |
| Material   |      |      |     |  |                   |   |             |              |              |  |  |
| Operator   |      |      |     |  |                   |   |             |              |              |  |  |
| Offset/Setup   |      |      |     |  |                   |   |             |              |              |  |  |
| Process  |      |      |     |  |                   |   |             |              |              |  |  |
| Supplier   |      |      |     |  |                   |   |             |              |              |  |  |
| Training   |      |      |     |  |                   |   |             |              |              |  |  |
| Transport  |      |      |     |  |                   |   |             |              |              |  |  |
| Unapproved   |      |      |     |  |                   |   |             |              |              |  |  |

| FAULT CATEGORY   |  |   |  |  |
|--|--|---|--|--|
| <b>Landing Gear</b><br><input type="checkbox"/> Bending<br><input type="checkbox"/> Centre Not Concentric<br><input type="checkbox"/> Cracks<br><input type="checkbox"/> Crimp/Kink/Ripple/Wave<br><input type="checkbox"/> Cuffs<br><input type="checkbox"/> Crushing<br><input type="checkbox"/> Heat Treat<br><input type="checkbox"/> Inspection Strip in Tube<br><input type="checkbox"/> Marks/Chatter<br><input type="checkbox"/> Turning Sequence<br><input type="checkbox"/> Wave/Twist in Tube | <b>General</b><br><input type="checkbox"/> Bend<br><input type="checkbox"/> BOM/Route<br><input type="checkbox"/> Broken/Damage/Defect<br><input type="checkbox"/> Burrs<br><input type="checkbox"/> Contamination<br><input type="checkbox"/> Countersink<br><input type="checkbox"/> Cut Too Short<br><input type="checkbox"/> Drawing<br><input type="checkbox"/> Drill Holes<br><input type="checkbox"/> Finish<br><input type="checkbox"/> Fit/Function | <input type="checkbox"/> Folio/Program<br><input type="checkbox"/> Grain<br><input type="checkbox"/> Hardware<br><input type="checkbox"/> Inspection Incomplete/Unqualified<br><input type="checkbox"/> Instructions Incomplete/Unclear<br><input type="checkbox"/> Misaligned/off center<br><input type="checkbox"/> Mislabeled<br><input type="checkbox"/> Misread<br><input type="checkbox"/> Off-set<br><input type="checkbox"/> Out of Calibration<br><input type="checkbox"/> Out of Sequence | <input type="checkbox"/> Outside Dimensions<br><input type="checkbox"/> Over/Under tolerance<br><input type="checkbox"/> Part Incorrect<br><input type="checkbox"/> Part Lost/Missing<br><input type="checkbox"/> Part Moved<br><input type="checkbox"/> Positioned Wrong<br><input type="checkbox"/> Power Loss/Surge<br><br><input type="checkbox"/> Pressure/Forced Set-up<br><input type="checkbox"/> Temperature/Cure<br><input type="checkbox"/> Weld<br><input type="checkbox"/> Wrong Stock Pulled<br><input type="checkbox"/> Other |  |

# Picklist Print

Thursday, August 07, 2014 11:15:02 AM

Page 1

Work Order ID: 123415

**\*123415\***

Parent Item: D3535-25

**\*D3535-25\***

Parent Item Name: Wearplate Center

Start Date: 8/07/14

Required Date: 8/07/14

Start Qty: 12.00

Required Qty: 12.00

Comments: IPP Rev:A New Issue 07-02-15 JLM  
IPP Rev:B As per Rev B 07-08-31 JLM Verified By:EC

| Component Item ID/<br>Item Name | Replacement<br>Item ID | Mfg/<br>Purch | Bin<br>Item | Primary<br>Location | Last<br>Location | Route<br>Seq ID | Unit of<br>Measure | Qty on<br>Hand | Qty per Kit | Total<br>Qty | Qty<br>Issued | Date<br>Issued           | Status      |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|--------------------------|-------------|
| M304S20GA                       |                        | Purchased     | No          |                     |                  | 100             | sf                 | 290.2519       | 0.51        | 13           |               |                          |             |
| <b>*M304S20GA*</b>              |                        |               |             |                     |                  |                 |                    |                | <b>**</b>   |              |               |                          |             |
| 304/316 .040 Sheet              |                        |               |             |                     |                  |                 |                    |                |             |              |               | DAS<br><b>46</b><br>9-89 | DE 14/08/20 |

Location

Loc Qty

Loc Code

MAT020

290.2518948

m126852

0.31

m127454

26.1018948

m128435

117.14

m129128

6.5

m129530

10.2

m129845

130

129315

17.5

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

|  |  |   |                                      |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
|--|--|---|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--|----------------------------------|--|------------------------------------|--|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/> | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input type="checkbox"/>   | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> |  |
| Skid-tube <input type="checkbox"/>                           | Crosstube <input type="checkbox"/>   | Water Jet <input type="checkbox"/>  | Engineering <input type="checkbox"/> |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Machining <input type="checkbox"/>                           | Small Fab <input type="checkbox"/>   | Prod. Eng. Coord. <input type="checkbox"/>  | Quality <input type="checkbox"/>     |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Thermoforming <input type="checkbox"/>                       | Finishing <input type="checkbox"/>   | Rec/Store/Packaging <input type="checkbox"/>  | Other <input type="checkbox"/>       |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Large Fab <input type="checkbox"/>                           | Composite <input type="checkbox"/>   | Supplier <input type="checkbox"/>   |                                      |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |

| Root Cause    | Date | Step | Qty | Description of work order update or non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---------------|------|------|-----|---|-------------------|--------------------|-------------|--------------|--------------|
| Design        |      |      |     |   |                   |                    |             |              |              |
| Doc/Data      |      |      |     |   |                   |                    |             |              |              |
| Equip/Tooling |      |      |     |   |                   |                    |             |              |              |
| Handling/Pre  |      |      |     |   |                   |                    |             |              |              |
| Material      |      |      |     |   |                   |                    |             |              |              |
| Operator      |      |      |     |   |                   |                    |             |              |              |
| Offset/Setup  |      |      |     |   |                   |                    |             |              |              |
| Process       |      |      |     |   |                   |                    |             |              |              |
| Supplier      |      |      |     |   |                   |                    |             |              |              |
| Training      |      |      |     |   |                   |                    |             |              |              |
| Transport     |      |      |     |   |                   |                    |             |              |              |
| Unapproved    |      |      |     |   |                   |                    |             |              |              |

### FAULT CATEGORY

|  |  |   |  |
|--|--|---|--|
| <b>Landing Gear</b><br><input type="checkbox"/> Bending<br><input type="checkbox"/> Centre Not Concentric<br><input type="checkbox"/> Cracks<br><input type="checkbox"/> Crimp/Kink/Ripple/Wave<br><input type="checkbox"/> Cuffs<br><input type="checkbox"/> Crushing<br><input type="checkbox"/> Heat Treat<br><input type="checkbox"/> Inspection Strip in Tube<br><input type="checkbox"/> Marks/Chatter<br><input type="checkbox"/> Turning Sequence<br><input type="checkbox"/> Wave/Twist in Tube | <b>General</b><br><input type="checkbox"/> Bend<br><input type="checkbox"/> BOM/Route<br><input type="checkbox"/> Broken/Damage/Defect<br><input type="checkbox"/> Burrs<br><input type="checkbox"/> Contamination<br><input type="checkbox"/> Countersink<br><input type="checkbox"/> Cut Too Short<br><input type="checkbox"/> Drawing<br><input type="checkbox"/> Drill Holes<br><input type="checkbox"/> Finish<br><input type="checkbox"/> Fit/Function | <input type="checkbox"/> Folio/Program<br><input type="checkbox"/> Grain<br><input type="checkbox"/> Hardware<br><input type="checkbox"/> Inspection Incomplete/Unqualified<br><input type="checkbox"/> Instructions Incomplete/Unclear<br><input type="checkbox"/> Misaligned/off center<br><input type="checkbox"/> Mislabeled<br><input type="checkbox"/> Misread<br><input type="checkbox"/> Off-set<br><input type="checkbox"/> Out of Calibration<br><input type="checkbox"/> Out of Sequence | <input type="checkbox"/> Outside Dimensions<br><input type="checkbox"/> Over/Under tolerance<br><input type="checkbox"/> Part Incorrect<br><input type="checkbox"/> Part Lost/Missing<br><input type="checkbox"/> Part Moved<br><input type="checkbox"/> Positioned Wrong<br><input type="checkbox"/> Power Loss/Surge<br><br><input type="checkbox"/> Pressure/Forced<br><input type="checkbox"/> Set-up<br><input type="checkbox"/> Temperature/Cure<br><input type="checkbox"/> Weld<br><input type="checkbox"/> Wrong Stock Pulled<br><input type="checkbox"/> Other |
|--|--|---|--|







**DART AEROSPACE USA, INC.**  
PORT HADLOCK, WA

07-04-24

14-0808



- NOTES**
- 1) MATERIAL: AISI 304/316 SS SHEET PER AMS 5513 OR AMS 5524,  
20 GAUGE (0.038 THICK)  
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  - 2) FINISH: POWDER COAT GREY SANDTEX (4.3.5.6) PER  
QSI 005 4.3
  - 3) PART IS SYMMETRICAL ABOUT  $\phi$
  - 4) TOLERANCES ARE PER DART QSI 018 UNLESS  
OTHERWISE NOTED
  - 5) ALL DIMENSIONS ARE IN INCHES
  - 6) BREAK ALL SHARP EDGES TO 0.010 MAX
  - 7) IDENTIFY WITH DART P/N USING WHITE FINE POINT  
PAINT MARKER
  - 8) SEE PAGE 7 FOR DETAILS AND SECTION
- 4.50 TO BEND  
LINE (ON FLAT  
PATTERN)
- 0.32  
(REF)

|  |   |   |
|--|---|---|
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| CHECKED<br> | APPROVED<br> | DRAWING NO.<br><b>D3535</b><br>REV. B<br>SHEET 1 OF 7 |
| DATE<br><b>07.04.17</b>  | TITLE<br><b>WEARSHOE</b><br>SCALE<br><b>1:10</b>  |   |
| <b>A</b>   | <b>06.10.25</b>   | <b>NEW ISSUE</b>                                      |
| <b>B</b>   | <b>07.04.17</b>   | <b>MOVE TAB OUTBOARD, ADD AMS SPEC</b>                |

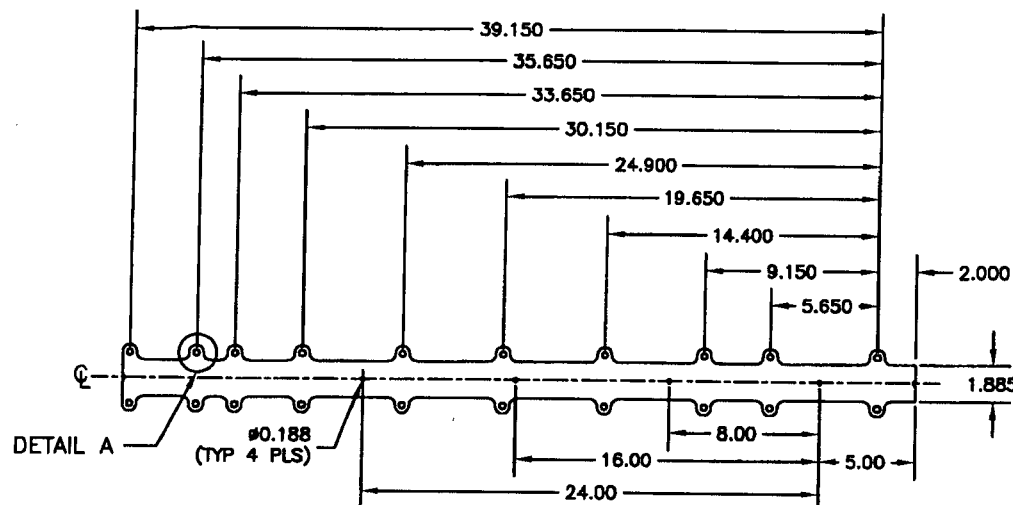
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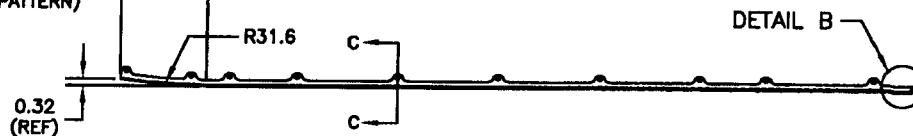
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|         |                    | TITLE       | WEARSHOE           | SHEET 2 OF 7             |
|         |                    |             |                    | SCALE 1:10               |

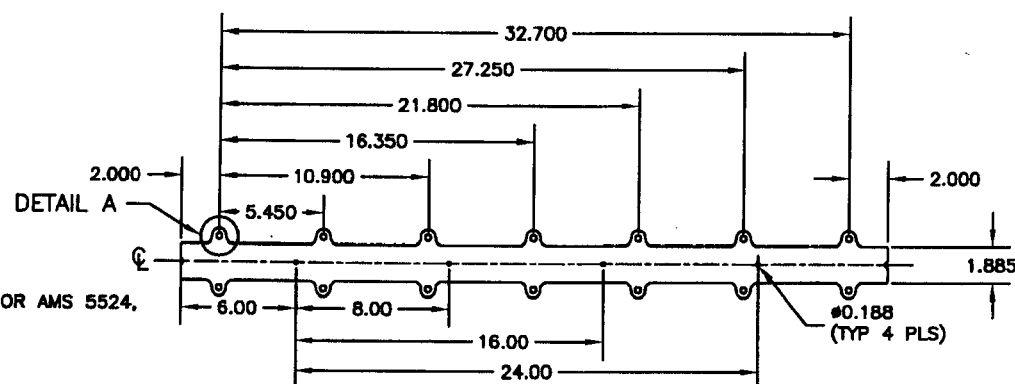


**D3535-15F FLAT PATTERN**

4.50 TO BEND  
LINE (ON FLAT  
PATTERN)

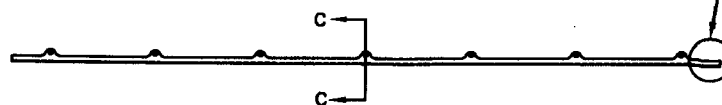


**D3535-15 BEND DETAIL**



**D3535-21F FLAT PATTERN**

DETAIL B



**D3535-21 BEND DETAIL**

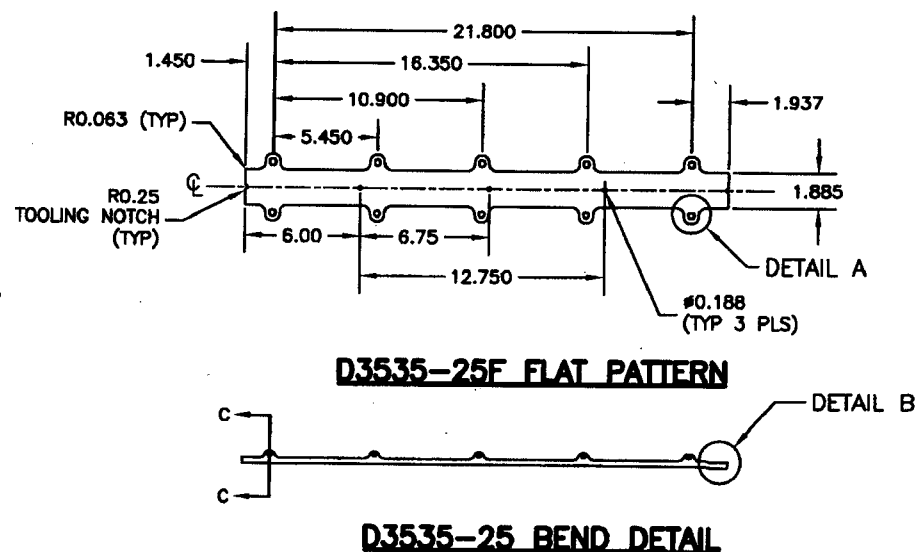
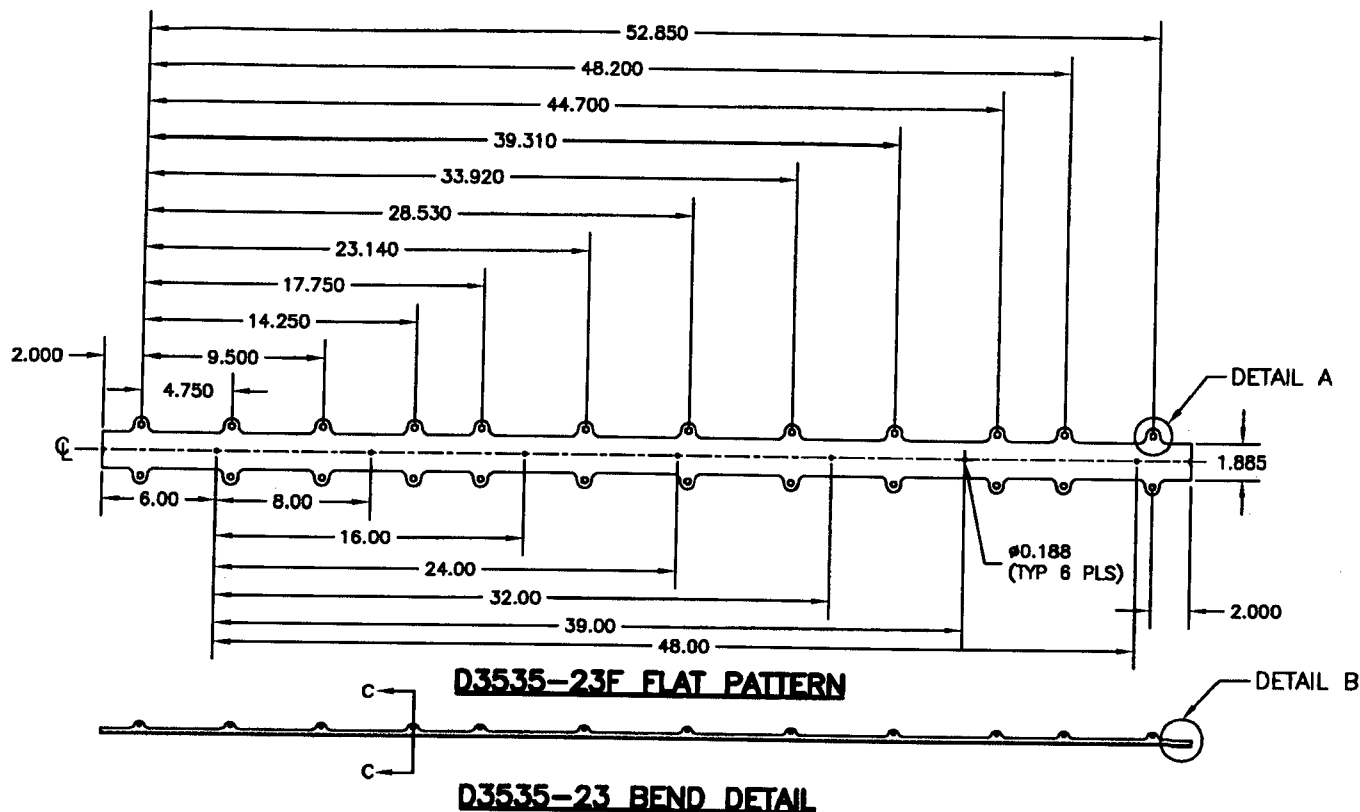
**NOTES**

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- 6) BREAK ALL SHARP EDGES TO 0.010 MAX
- 7) IDENTIFY WITH DART P/N USING WHITE FINE POINT PAINT MARKER
- 8) SEE PAGE 7 FOR DETAILS AND SECTION



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|         |          | WEARSHOE                 | 1:10         |

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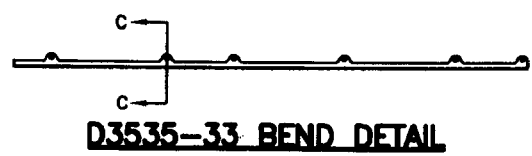
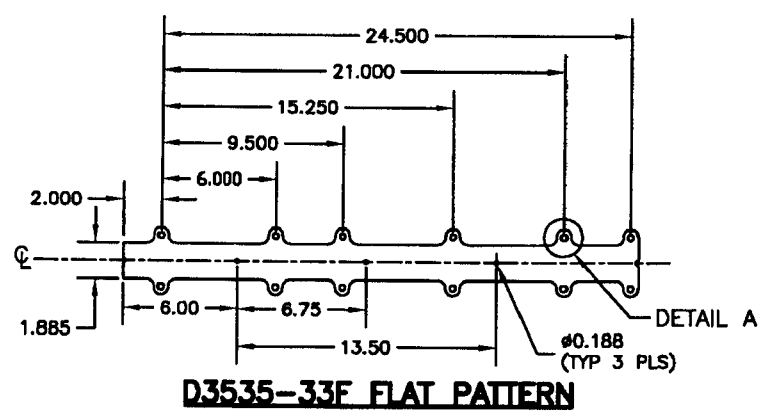
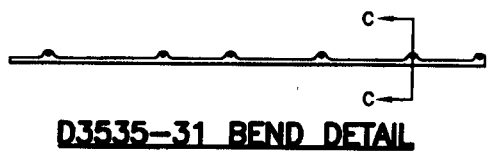
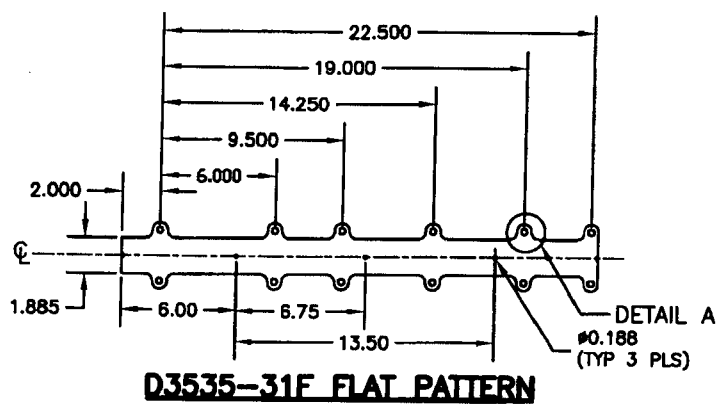
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|         |                    | DRAWING NO. | D3535              | SHEET 4 OF 7             |
|         |                    | SCALE       | 1:10               |                          |



**NOTES**

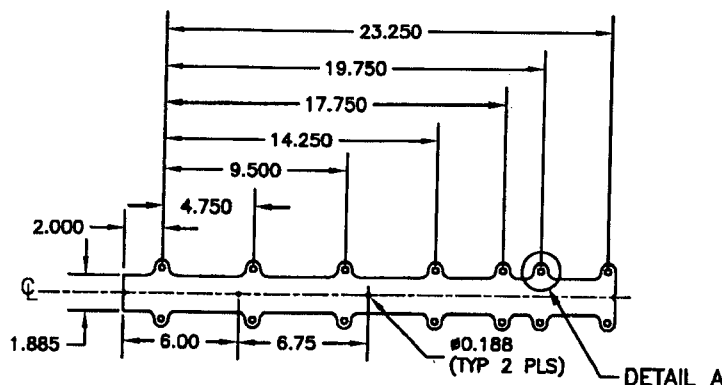
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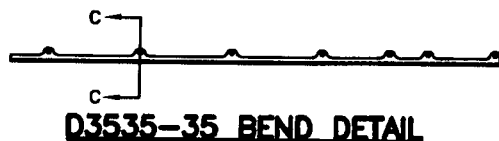
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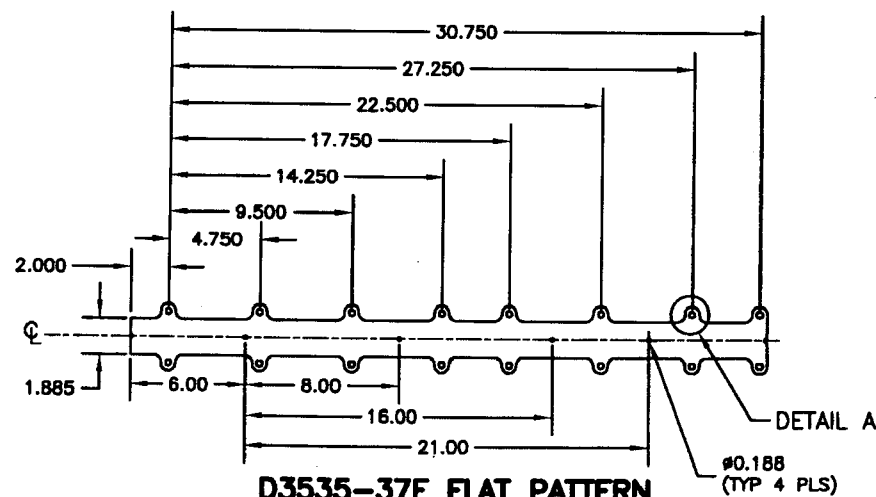
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|         |                    | TITLE       | WEARSHOE           | SHEET 5 OF 7             |
|         |                    | SCALE       | 1:10               |                          |



**D3535-35F FLAT PATTERN**



**D3535-35 BEND DETAIL**



**D3535-37F FLAT PATTERN**



**D3535-37 BEND DETAIL**

**NOTES**

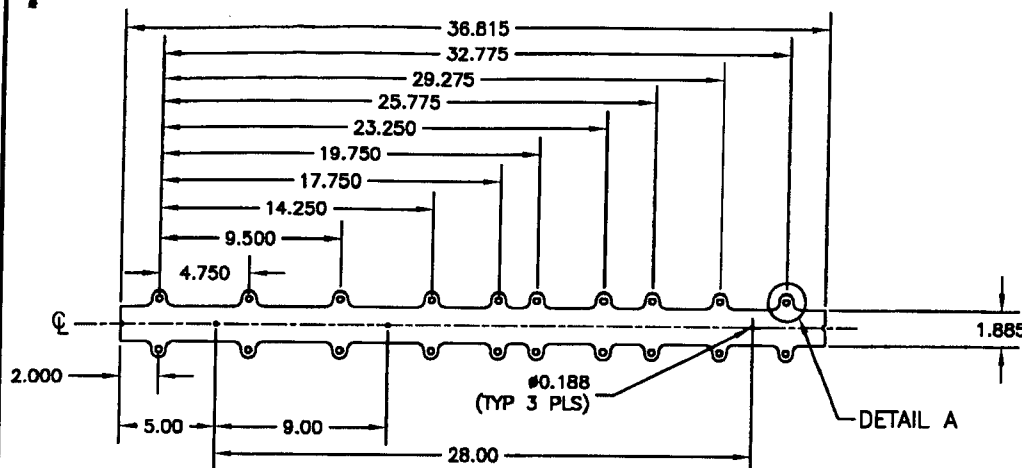
- 1) MATERIAL: AISI 304/316 SS SHEET PER AMS 5513 OR AMS 5524, 20 GAUGE (0.038 THICK) (REF DART SPEC M304S20GA)
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**DART**

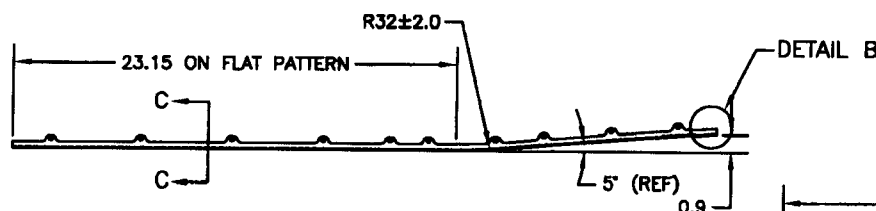
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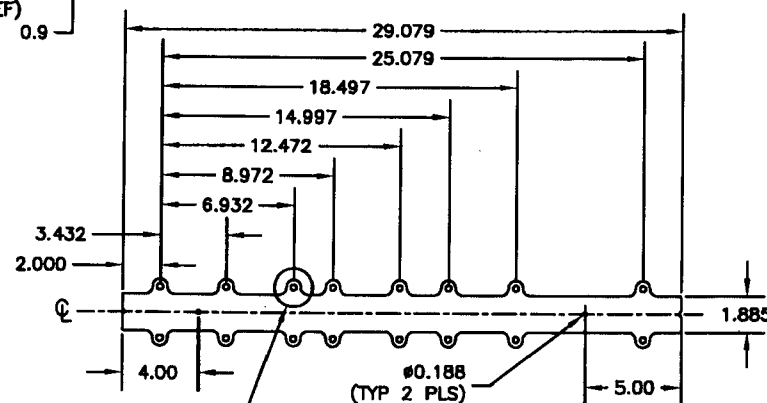
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| TITLE   | WEARSHOE           | SHEET       | 6 OF 7             | SCALE                    |
|         |                    |             |                    | 1:10                     |



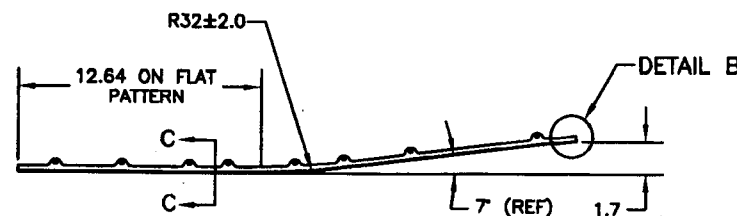
**D3535-39F FLAT PATTERN**



**D3535-39 BEND DETAIL**



**D3535-41F FLAT PATTERN**



**D3535-41 BEND DETAIL**

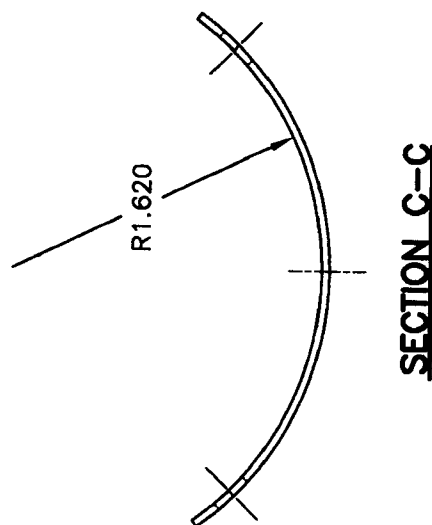
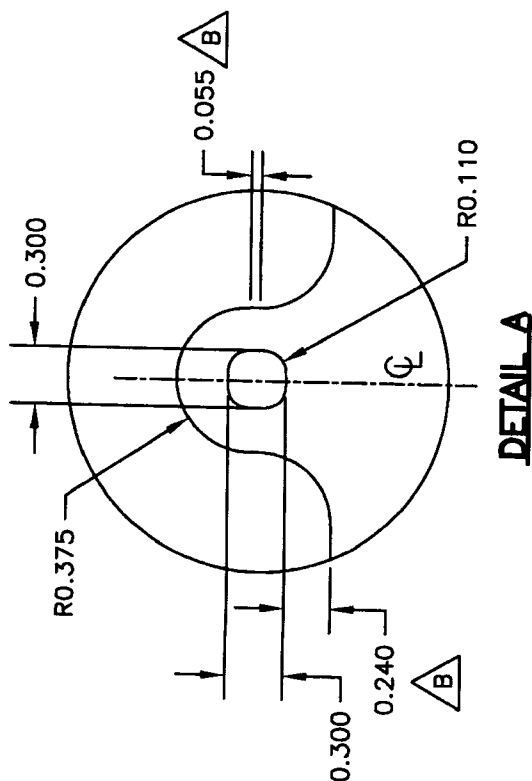
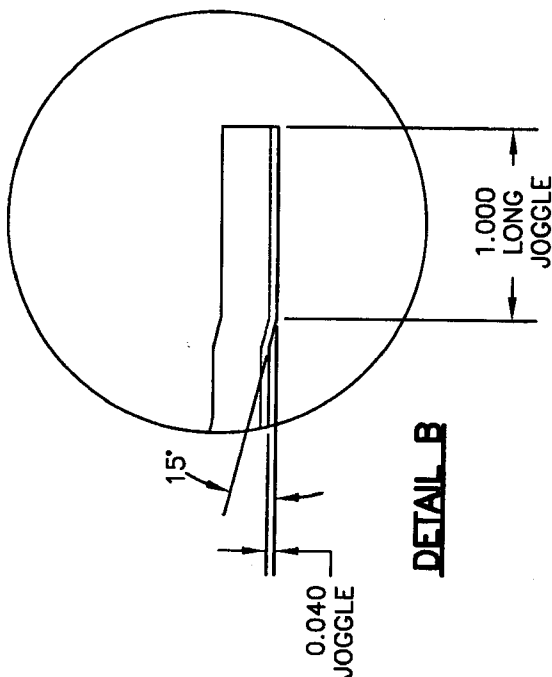
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